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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,911	01/07/2005	David W. Loughnan	084531-000000US	4919
20350	7590	06/09/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			LUM VANNUCCI, LEE SIN YEE	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/520,911	LOUGHNAN, DAVID W.	
	Examiner	Art Unit	
	Lee Lum	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-12,16-18,20-22 and 27-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A Preliminary Amendment was filed 1/7/05 in which Claims 4, 13-15, 19, 23-26 and 41 were also cancelled.

2. Claim 11 is objected to because "secondary driven element" should be "secondary driving element".

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-12, 22, 28, 30, 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al 5899294.

Shimizu discloses a mechanical coupling comprising

Clutch mechanism 40 between driving element/electric motor shaft 5a, and driven element/steering shaft 11, wherein,

In normal use, the driving element drives the driven element/shaft - inherent,

But with a manual torque applied to the driven element, via the steering wheel, overrides the clutch, and the driven element is driven by this torque – c9, In 47, to c10, In 42, and,

The clutch is adjustable such that it can slip to prevent transmission of a torque greater than a threshold – same portion of disclosure,

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The coupling further including

Secondary driving element/pinion gear 7, *as broadly and reasonably interpreted*, provided between the driving element and clutch, coaxial with the driven element (i.e., forms part of), and connected to the driving element, via gear mechanism/link/worm 31.

The reference discloses a method of coupling driving and driven elements, the steps derived from the structure/means provided above.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claims 16-18, 20, 21, 27 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu in view of Hata 4969546.

Shimizu does not disclose a hydraulic clutch system, while Hata shows this well-known configuration in figs 1 and 2, with (electronic) controller 90, and piston 36 coupling clutch elements 12,18,34, as provided in c4, ln 16-24. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this embodiment, as shown in Hata, for different applications. Prior art provides various clutch arrangements, all functionally equivalent.

B. **Claims 29 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu in view of Hata, and in further view of Nimblett Jr et al 5564516.

Re **Claim 29**, the previous references do not disclose the power steering system, and clutch, as supplied by one pump, while Nimblett shows this alternate arrangement in fig 3. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this embodiment, as shown in Nimblett, to decrease the number of components required for a hydraulic power steering and clutch system, thus decrease costs and complexity.

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Re **Claim 32**, the previous references do not disclose a controller controlling both power steering and clutch operations, while Nimblett shows controller 51 with this capability in c2, In 54-56. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this embodiment, as shown in Nimblett, to centralize control for two related systems, thus decrease costs and complexity.

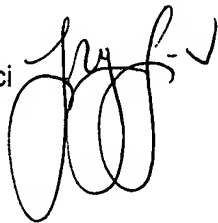
5. The prior art considered pertinent, but not relied upon, includes:
Morishita et al 4666010.

6. Communication with the Examiner/USPTO

Any inquiry concerning this communication, or others, should be directed to Ms. Lum-Vannucci at 571 272 6649, M-F, 9-5. If she can't be reached, her supervisor, Ms. Lesley Morris, may be reached at 571 272 6651. Our fax number is 571 273 8300.

Info re the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system as follows: for unpublished applications – private PAIR only, for published applications – private or public PAIR. For more info on PAIR – <http://pair-direct.uspto.gov>. For more info on private PAIR – call the Electronic Business Center at 866 217 9197.

Ms. Lee Lum-Vannucci
Examiner
6/7/06

A handwritten signature in black ink, appearing to read 'Lee Lum-Vannucci', with a checkmark at the end.